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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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26304	7590	02/18/2005	EXAMINER	
KATTEN MUCHIN ZAVIS ROSENMAN 575 MADISON AVENUE NEW YORK, NY 10022-2585			KADING, JOSHUA A	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,090

Applicant(s)

SAITO ET AL.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 1, 2, 7, 8, 9, 10, and 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 1, 2, 7, 8, 9, 10, and 11 are objected to because of the following informalities:

5 Claim 1, lines 11-12 discloses, "a priority of said routing information of the network identification information". There is potential confusion here because it is not clear which "routing information" is being referenced. Therefore, it is suggested lines 11-12 be changed to --a priority of said source routing information and said hop-by-hop routing information of the network identification information--.

10 Claim 2, line 3 states "B-ISUP network and a PNNI network." To more clearly describe which network is which, line 3 should be changed to --B-ISUP network and a PNNI network respectively.--

 Claim 7, lines 5-6 state, "the subscriber device". This lacks antecedent basis and therefore should be changed to --a subscriber device--.

15 Claim 7, lines 9-10 state, "the multiple networks". This lacks antecedent basis and therefore should be changed to --a plurality of multiple networks--.

 Claim 8, line 2 states, "a network". Since this would lead to confusion by disclosing a new network (and it is believed this is not applicant's intent), line 2 should be changed to --the network--.

20 Claim 8, lines 2-3 state, "the source routing network and the hop-by-hop routing network." To be consistent with the parent claim, lines 2-3 should be changed to --the

source routing network or the hop-by-hop routing network.-- or --the one of the source routing network and the hop-by-hop routing network.--

Claim 9, line 2 states, "a network". Since this would lead to confusion by disclosing a new network (and it is believed this is not applicant's intent), line 2 should
5 be changed to --the network--.

Claim 9, line 2 states, "being a small". This doesn't make sense, and it is suggested line 2 be changed to --having a smallest--.

Claim 9, line 3 states, "the source routing network and the hop-by-hop routing network." To be consistent with the parent claim, line 3 should be changed to --the
10 source routing network or the hop-by-hop routing network.-- or --the one of the source routing network and the hop-by-hop routing network.--

Claim 10, line 2 states, "when the transmitted" It is suggested line 2 be changed to --if the transmitted--.

Claim 11, line 3 states, "which the routing is based". This should be changed to --
15 which routing is based--.

Claim 11, line 4 states, "to each value of the". For consistency, this should be changed to --to each of the--.

Claim 11, line 6 states, "the networks". For clarity, this should be changed to --the multiple networks--.

20 Claim 11, line 7 states, "the top priority." This lacks antecedent basis. It is suggested that line 7 be changed to --a top priority--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

5 A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10 Claim 12 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,473,603 (Iwata).

 Regarding claim 12, Iwata discloses, "a routing method comprising: receiving a call setup request having an information element (col. 6, lines 40-46 where, for instance, the destination address is an information element); selecting one of a source routing
15 network and a hop-by-hop routing network, based on the information element of the call setup request (col. 6, lines 46-55 where initially the hop-by-hop routing network is chosen because there is no known source routing information); and transmitting the call setup request to the selected network (col. 6, lines 46-55)."

20 ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

25 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata in view of U.S. Patent 6,826,196 B1 (Lawrence).

Regarding claim 13, Iwata discloses the method of claim 12. However, Iwata lacks what Lawrence discloses, "wherein the source routing network and the hop-by-hop routing network are a PNNI network and a B-ISUP network respectively (figure 5, elements 520 and 522 show the switch with control portions directed towards PNNI and B-ISUP based data)." It would have been obvious to one of ordinary skill in the art at the time of invention to have a PNNI and B-ISUP network as a matter of design choice/preference and to allow for a variety of data types (along with routing methods) to be transmitted over a single backbone network (Lawrence, as in figure 5 and described in col. 5, lines 10-30). The motivation for wanting to transmit a variety of different data types for a single backbone is to save on cost and resources by not having to have a backbone network for each type of data.

Regarding claim 1, Iwata discloses, "a switching system comprising: a switch receiving a call setup request having an information element (col. 6, lines 40-46 where the information element corresponds to the destination address); collating the information element and subscriber data, and extracting, from the subscriber data, network identification information that corresponds to the information element, said network identification information including source routing information and hop-by-hop routing information (col. 6, lines 46-55 where the destination address is used with the

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subscriber information in the table to determine whether there is source routing information); and selecting, based on priority of said source routing information and said hop-by-hop routing information of the network identification information, one of a source routing network and a hop-by-hop routing network (col. 6, lines 46-55 where since there is no information in the routing table corresponding to the destination address, there is a “new priority” so to speak, and the hop-by-hop network type is chosen based on this).”

However, Iwata lacks what Lawrence discloses, the collating is done by “a call control unit” and the selecting is done by “a routing control unit” (figure 3B shows the control unit 302 which contains call control (signaling control) and routing control (routing control)).

It would have been obvious to one of ordinary skill in the art to include the call control unit and routing control unit for the purpose of allowing a single switch to choose between several different network types (Lawrence, as in figure 5 and described in col. 5, lines 10-30). The motivation for wanting to choose a variety of different network types is to allow multiple different data types to be transmitted over a single backbone as this will save on cost and resources by not having to have a backbone network for each type of data.

Regarding claim 2, Iwata and Lawrence disclose the system of claim 1. However, Iwata lacks what Lawrence further discloses, “wherein the source routing network and the hop-by-hop network are at least a B-ISUP network and a PNNI network respectively (figure 5, elements 520 and 522 show the switch with control portions directed towards

PNNI and B-ISUP based data).” It would have been obvious to one of ordinary skill in the art at the time of invention to have a PNNI and B-ISUP network as a matter of design choice/preference and for the same reasons and motivation as in claim 1.

5 Regarding claim 3, Iwata and Lawrence disclose the system of claim 1. However, Lawrence lacks what Iwata further discloses, “wherein the information element is a subscriber identifier (col. 6, lines 40-43 where the subscriber identifier is a destination address).” It would have been obvious to one with ordinary skill in the art at the time of invention to have a subscriber identifier for the same reasons and motivation as in claim
10 1.

 Regarding claim 4, Iwata and Lawrence disclose the system of claim 1. However, Lawrence lacks what Iwata further discloses, “wherein the information element includes a value of a network identifier indicating a routing destination (col. 6, lines 40-43).” It
15 would have been obvious to one with ordinary skill in the art at the time of invention to have a routing destination for the same reasons and motivation as in claim 1.

 Regarding claim 5, Iwata and Lawrence disclose the system of claim 1. However, Iwata lacks what Lawrence further discloses, “wherein the information element includes
20 a value of traffic class (col. 4, lines 48-50).” It would have been obvious to one with ordinary skill in the art at the time of invention to have a traffic class for the same reasons and motivation as in claim 1.

Regarding claim 6, Iwata and Lawrence disclose the system of claim 1. However, Lawrence lacks what Iwata further discloses, "wherein the information element includes a value of a network identifier indicating a routing destination (col. 6, lines 40-43)." It would have been obvious to one with ordinary skill in the art at the time of invention to have a routing destination for the same reasons and motivation as in claim 1.

Regarding claim 7, Iwata discloses, "a switching system comprising: a switch receiving a call setup request having an information element from a subscriber device (col. 6, lines 40-46 where the information element corresponds to the destination address); and selecting, based on a state of use of each of a plurality of networks, one of a source routing network and a hop-by-hop routing network of the multiple networks (col. 6, lines 46-55 where since there is no information in the routing table corresponding to the destination address, there is a "new state" so to speak, and the hop-by-hop network type is chosen based on this)."

However, Iwata lacks what Lawrence discloses, the selecting is done by "a routing control unit" (figure 3B shows the control unit 302 which contains routing control (routing control)).

It would have been obvious to one of ordinary skill in the art to include the routing control unit for the purpose of allowing a single switch to choose between several different network types (Lawrence, as in figure 5 and described in col. 5, lines 10-30). The motivation for wanting to choose a variety of different network types is to allow

multiple different data types to be transmitted over a single backbone as this will save on cost and resources by not having to have a backbone network for each type of data.

Regarding claim 11, Iwata and Lawrence disclose the system of claim 7.

5 However, Lawrence lacks what Iwata further discloses, "wherein the call setup request from the subscriber device includes information elements on which routing is based, and subscriber data that includes priorities corresponding to each of the information elements and network identifiers corresponding to each of the information elements (col. 6, lines 46-55 where the destination address is used with the subscriber data in the

10 table to determine whether there is source routing information, thus identifies the type of routing), and wherein the routing control unit selects a network among the multiple networks based on a identifier corresponding to a top priority (col. 6, lines 46-55 where since there is no information in the routing table corresponding to the destination address, there is a "new priority" so to speak, and the hop-by-hop network type is

15 chosen based on this)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the priorities for selecting the routing type for the same reasons and motivation as in claim 7.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

20 Iwata and Lawrence as applied to claim 7 above, and further in view of U.S. Patent 5,878,029 (Hasegawa et al.)

Regarding claim 8, Iwata and Lawrence disclose the system of claim 7. However, Iwata and Lawrence lack what Hasegawa discloses, "wherein the routing control unit selects the network having a greater remaining bandwidth from the source routing network or the hop-by-hop routing network (col. 7, lines 7-20 whereby selecting the

5 network with the least wasted residual bandwidth, the network with the greatest remaining bandwidth has effectively been selected)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the selecting of the network with the greatest remaining bandwidth for the purpose of not overloading networks. The motivation for not overloading networks is so that the entire system of all

10 networks will function more efficiently.

Regarding claim 9, Iwata and Lawrence disclose the system of claim 7. However, Iwata and Lawrence lack what Hasegawa discloses, "wherein the routing control unit selects the network having a smallest call quantity per unit time from the source routing

15 network or the hop-by-hop routing network (col. 7, lines 7-20 whereby selecting the network with the least wasted residual bandwidth, the network with the least amount of calls has effectively been selected because it logically follows that the smaller the number of calls on the network the more bandwidth there is available)." It would have been obvious to one with ordinary skill in the art at the time of invention to include the

20 selecting of the network with the smallest call quantity for the purpose of not overloading networks. The motivation for not overloading networks is so that the entire system of all networks will function more efficiently.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata and Lawrence as applied to claim 7 above, and further in view of U.S. Patent 6,542,600 B1 (Munson et al.)

5 Regarding claim 10, Iwata and Lawrence disclose the system of claim 7. However, Iwata and Lawrence lack what Munson discloses, "wherein if the transmitted call setup request for a source routing network or a hop-by-hop network is refused, the switch transmits the call setup request to the other of the source routing network or the hop-by-hop network (figure 2, elements 206, 208, 209, 210, 212, and 213 where
10 although Munson is directed towards choosing another node (and not specifically a network), one of ordinary skill in the art would recognize that a network is nothing more than a node in a larger system of networks and thus the concept of trying a different node if the request fails is applicable to networks)." It would have been obvious to one of ordinary skill in the art at the time of invention to include the choosing of a different
15 network if the current request fails for the purpose of completing a call request setup even if the first try is refused. The motivation for doing so would be to improve resource utilization and allocation in a system (Munson, col. 3, lines 14-21).

Response to Arguments

20 Applicant's arguments, see REMARKS, page 6, 35 U.S.C. § 112 Rejection, filed 2 November 2004, with respect to the 112, second paragraph rejections of claims 4, 8,

and 10 have been fully considered and are persuasive. The 112, second paragraph rejections of claims 4, 8, and 10 have been withdrawn.

Applicant's arguments with respect to claims 1-13 have been considered but are
5 moot in view of the new ground(s) of rejection.

Conclusion


Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP
10 § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not
15 mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

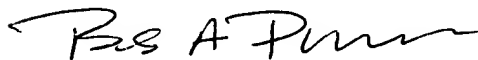
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joshua Kading
Examiner
Art Unit 2661

15
February 10, 2005


BOB PHUNKULH
PRIMARY EXAMINER